

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicants have addressed the Examiner's objection to the abstract.

Telephone Interview Summary

The applicants thank Examiner Do for the June 30, 2006 interview between Examiner Do, Mel Biggs, and applicant's attorneys Frank Occhiuti and Erin Henson. During the interview, the propriety of the rejection of the claims as anticipated by the Yamamori patent (U.S. 4,358,781) was discussed.

Disposition of Claims

Prior to this response, the application included claims 1-33. Applicants have canceled claims 13-15, 19, 21, 22 and 29-33. Examiner has twice rejected claims 1-4, 8, and 10-12, and objected to claims 5-7, and 9. Applicants acknowledge the Examiner's indication that claims 16-18, 20, and 23-28 are allowed, and claims 5-7, and 9 would be allowable if amended to be independent form and to include the features recited in base claim 1. Accordingly, claims 1-12, 16-18, 20, and 23-28 are presented for examination, with claims 1, 16, and 23 being in independent form.

Rejections under 35 U.S.C. §102

The Office Action rejects claims 1, 4, 10, and 11 under 35 U.S.C. 102(b) as being anticipated by Yamamori et al. (U.S. 4,358,781).

Independent Claim 1

The Examiner rejected claim 1 as anticipated by Yamamori. Applicants respectfully submit that Yamamori fails to disclose one more waste fluid control apertures...being in communication with a vacuum source as recited in claim 1. Rather, Yamamori discloses a pressurized air supply source 12 in communication with air chamber 15 and ink supply source 11 in Fig. 1. Applicants respectfully submit that Yamamori's pressurized air supply source is not a

vacuum source. A vacuum source draws air causing a negative pressure while Yamamori's pressurized air supply source expels positive pressurized air.

Yamamori describes ejecting the pressurized air from the pressurized air supply source 12 to the air chamber 15 and through an air nozzle 22. The pressurized air forms a laminar air flow that confines and directs a stream of ink droplets through aligned nozzles 20 and 22 toward a writing surface. (See col. 3, lines 36-40; col. 1, lines 50-59) Conversely, Applicants describe a vacuum source that draws air causing waste ink to be drawn into apertures 32, such that waste ink does not pool excessively on the nozzle plate. (paragraphs [0020-0021]) While Yamamori discloses a positive pressure source that assists ink flow through a nozzle, Applicants describe a negative pressure source for drawing waste ink away from a nozzle.

Accordingly, applicants submit that claim 1 is not anticipated and respectfully requests that the rejection under 35 U.S.C. 102 be withdrawn. Furthermore, because claims 4, 5-7, and 9-11 depend from claim 1, these dependent claims are not anticipated for at least the same reason that independent claim 1 is not anticipated.

The Examiner also rejected dependent claims 2, 3, and 8 as being unpatentable over Yamamori et al in view of Le et al (U.S. 4,613,875). The Examiner acknowledges that Yamamori et al fails to disclose a drop ejection device having fluid control apertures which are spaced from the nozzle opening by about 200% of the nozzle opening width or less, fluid control apertures which are spaced from the nozzle opening by about 200% to about 1000% of the nozzle opening width or less, and the width of the nozzle opening is about 200 microns or less. Applicants submit however Le et al fails to disclose the feature found to be lacking in Yamamori et al. In particular, Le et al does not describe or suggest one more waste fluid control apertures...being in communication with a vacuum source.

The Examiner also rejected dependent claim 12 as being unpatentable over Yamamori et al in view of Howkins et al (U.S. 4,459,601). The Examiner acknowledges that Yamamori et al fails to disclose the body is a silicon material. Applicants submit however Le et al fails to disclose the feature found to be lacking in Yamamori et al. In particular, Howkins et al does not describe or suggest one more waste fluid control apertures...being in communication with a vacuum source.

Accordingly, applicants submit that claims 2, 3, 8, and 12 are not obvious and respectfully request that the rejection under 35 U.S.C. 103 be withdrawn.

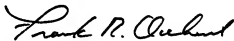
Conclusion

The applicants believe that the claims have been shown to be allowable over the prior art. Applicants believe that this reply is responsive to each ground of rejection cited by the examiner in the Action dated May 2, 2006, and respectfully request favorable action in this application.

Please apply any charges, not covered, or credits to deposit account 06-1050, referencing Attorney Docket Number 09991-148001.

Respectfully submitted,

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